

## DAVIS ESSENTIAL SKILLS AND KNOWLEDGE

## CE INTRO ENG DESIGN 2 PLTW

## **Course Description**

This **Project Lead the Way** (PLTW) course is the equivalent to CAD Mechanical Design 3 in the USBE course catalog. This course series prepares individuals with an emphasis in developing technical knowledge and skills to develop working drawings in support of mechanical and industrial engineers, and related professionals. This includes instruction in the use of 3D Computer-Aided Design (CAD) software, threads and fasteners, welding symbols, geometric dimensioning and tolerancing, and assemblies.

## **Strands**

- 1. Students will be able to understand and properly specify the correct type of fasteners.
- 2. Students will be able to understand and identify basic welding symbols.
- 3. Students will be able to develop and correctly place sectional views and auxiliary views.
- 4. Students will be able to demonstrate the ability to create a flat pattern development.
- 5. Students will be able to understand and demonstrate the basics of Geometric Dimensioning and Tolerancing (GD&T).
- 6. Students will create assembly and working drawings.

